

*Art 34
Omnibus*

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What is claimed is:

- Sub A1*
1. An aptamer having a sequence which includes at least two G-rich regions selected from the group of GGnG, GGGG, GnGG, nGGG and GGGn, where G is guanidine and n is any nucleotide.
 2. The aptamer of claim 1 wherein at least two of the at least two regions are separated by less than two to seven nucleotides, inclusive.
 3. The aptamer of claim 1 wherein at least two of the at least two regions are separated by three to six nucleotides, inclusive.
 4. The aptamer of claim 1 wherein at least two of the at least two regions are separated by four nucleotides.
 5. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein.
 6. The aptamer of claim 2 wherein the immune regulatory protein is selected from the group of SP1, NFkB, EGR1 and AP2.
 7. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises GGnG, and at least two of the at least two regions are separated by two to seven nucleotides.
 8. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises GGGG, and at least two of the at least two regions are separated by two to seven nucleotides, inclusive.
 9. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises GnGG, and at least two of the at least two regions are separated by two to seven nucleotides, inclusive.

- Sub 3X Amend
10. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises nGGG or GGn, and at least two of the at least two regions are separated by two to seven nucleotides, inclusive.
11. The aptamer of claim 1 comprising the sequence 5' TTG GAG GGG GTG GTG GGG 3' (Seq. Id. No. 4).
12. The aptamer of claim 1 comprising the sequence 5' GGG GAG GAG GGG CTG GAA 3' (Seq. Id. No. 5).
13. The aptamer of claim 1 comprising the sequence 5' GGG GTG GTG GGG 3' (Seq. Id. No. 13).
14. The aptamer of claim 1 comprising the sequence 5' TTG GAG GGG GAG GAG GGG 3' (Seq. Id. No. 7).
15. The aptamer of claim 1 comprising the sequence 5' TTG GAG GGG GAG GTG GGG 3' (Seq. Id. No. 8).
16. The aptamer of claim 1 comprising the sequence 5' GGG TTG GAG GGG GTG GTG GGG 3' (Seq. Id. No. 6).
17. A method of modulating immune system response in a patient, comprising administering to the patient an aptamer according to any of claims 1-16.
18. A method of treating a patient having a condition characterized by an inappropriate immune system response, comprising administering to the patient an aptamer according to any of claims 1-16.
19. The method of claim 18 wherein the condition comprises a graft vs host response.
20. The method of claim 18 wherein the condition comprises an autoimmune disease.
21. The method of claim 20 wherein the condition comprises rheumatoid arthritis.

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22. The method of claim 20 wherein the condition comprises multiple sclerosis.

23. The method of claim 20 wherein the condition comprises lupus erythematosis.

24. The method of claim 20 wherein the condition comprises insulin dependent diabetes mellitus.

25. The method of claim 20 wherein the condition comprises psoriasis.

Add B'